### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.15

## SOURCE INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** SIR-001483 Address: 333 Burma Road **Date Inspected:** 27-Apr-2009

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Dao, Shangha

**Quality Control Contact:** William (Bill) Oak **Quality Control Present:** Yes No

**Material transfer:** Yes No N/A **Sampled Items:** Yes No N/A **Stock Transfer:** N/A OK to Cut: N/A Yes No Yes No **Rebar Test Witness:** Yes N/A **Delayed/Cancelled:** Yes N/A No No

Other: Coatings Inspection

**Bridge No:** 34-0006 OBG 2AE, Cross Beam, Counterweights, Lam **Component:** 

**Bid Item:** Lot No: 77, 78, 79 B265

### **Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following: Counterweights

Eight assemblies were re-blasted for the third time to amend coating deficiencies created by ZPMC. Interior previously coated surfaces were re-blasted to base metal to an SSPC SP-10 condition and Interzinc 22 was re-applied.

**OBG 2AE** 

ZPMC personnel abrasive blasted base metal surfaces of the contact areas of the segment support pedestals and applied Interzinc 22 to these areas.

**Light Support Assemblies** 

Repairs to mud crack areas were performed. Abrasive blasted to base metal and SSPC SP-10 condition and re-apply Interzinc 22 to amend repair work.

Cross Beam

Pedestal support areas were abrasive blasted to SSPC SP-10 condition and blasted base metal surfaces were coated with Interzinc 22.

Assembly Area Lift #3

Cursory survey of damages and repairs which will be performed after segment joining and fabrication is completed with ABF QA Dave Duon. Observed mechanical and flame damages as well as mud crack areas and rusting areas on segments and on miscellaneous metal in this area.

# SOURCE INSPECTION REPORT

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#### **OBG 2AE**

Performed adhesion and hardness testing on interior surfaces all testing values were within specification requirements.

Cross Beam

Mist coat of Interfine 979 was applied to exterior surfaces after masking was performed.

Light Support Assemblies

Follow up inspection ZPMC personnel applied Interzinc 22 over Interfine 979 once again. No feathering was observed on the edges of the blasted repair areas. Newly applied coating was removed via solvent wiping and feathering performed and Interzinc 22 was re-applied.

**OBG 2AE** 

ZPMC requested final visual inspection on interior surfaces and DFT check. Inside the segment there was insufficient lighting to conduct proper inspection process per approved PQWP. Sika 221 requires installation to the seams inside the ends of the "U" rib stiffeners.

Note: All inspections were performed jointly with ZPMC & ABF QA/QC personnel and Caltrans QA Lumley, International Protective Coatings technical service representative Zili Peng was also in attendance.

### **Summary of Conversations:**

No relevant conversations on this date.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang. (858) 699-9549, who represents the Office of Structural Materials for your project.

Inspected By:	Lumley,James	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer